Serial No. 10/775,908

Attorney Docket No. 400.272US01

Title: NROM FLASH MEMORY WITH A HIGH-PERMITTIVITY GATE DIELECTRIC

REMARKS

Rejections Relying on 35 U.S.C. § 102(e)

Applicant notes that the reference used in support of the rejections relies on 35 U.S.C. § 102(e). In responding to the rejections, Applicant does not admit that the reference is prior art and Applicant specifically reserves the right to swear behind any such references at a future date.

Claim Rejections Under 35 U.S.C. § 102

Claims 1 and 35-40 were rejected under 35 U.S.C. § 102(e) as being anticipated by Tripsas et al. (U.S. Patent No. 6,735,123). Claims 38-40 are canceled hereby without prejudice or disclaimer.

Claim 1 is amended to recite, in part, "wherein the HfO₂ of the gate dielectric is formed by evaporating Hafnium onto the nitride and then oxidizing the Hafnium." Applicant acknowledges that this is a product-by-process limitation. However, Applicant has provided support for structural differentiation resulting from the claimed process versus alternative processes. *See, e.g.*, Specification, paragraph 0036 (noting the avoidance of substrate damage). The cited reference states only that its HfO₂ may be performed utilizing chemical vapor deposition processes. Tripsas et al., column 7, lines 14-19.

The Office must take into consideration the product that would result from the performance of Applicant's process limitations. *See, e.g.*, MPEP § 2113 ("The structure implied by the process steps should be considered when assessing the patentability of product-by-process claims over the prior art, especially where the product can only be defined by the process steps by which the product is made, or where the manufacturing process steps would be expected to impart distinctive structural characteristics to the final product."). Applicant contends that it has provided support for structural differentiation resulting from its claimed process limitation, and that claim 1 is thus patentably distinct from the cited reference as a result. As claims 35-37 include all patentable limitations of claim 1, these claims are also believed to be allowable. Applicant thus respectfully requests reconsideration and withdrawal of the rejection under 35 U.S.C. § 102(e), and allowance of claims 1 and 35-37.

Serial No. 10/775,908

Title: NROM FLASH MEMORY WITH A HIGH-PERMITTIVITY GATE DIELECTRIC

Claim Rejections Under 35 U.S.C. § 103

Claims 41-44 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Tripsas et al. (U.S. Patent No. 6,735,123).

Claims 41 and 44 are each amended to recite, in part, "wherein the HfO₂ of the gate dielectric is formed by evaporating Hafnium onto the nitride and then oxidizing the Hafnium." For the same reasoning as applied to claim 1, Applicant contends that claims 41 and 44 are patentably distinct from the cited reference. Applicant further contends that the taking of official notice that the memory transistor of Tripsas et al. could be formed in a memory array, and used in an electronic system, fails to overcome the deficiencies of the Tripsas et al. reference with respect to claims 41 and 44. Thus, taken either alone or in combination, the primary reference of Tripsas et al. and the taking of official notice fail to teach or suggest at least this limitation of Applicant's claims 41 and 44. As claims 42-43 include all patentable limitations of claim 41, these claims are also believed to be allowable. Applicant thus respectfully requests reconsideration and withdrawal of the rejections under 35 U.S.C. § 103(a), and allowance of claims 41-44.

Serial No. 10/775,908

Attorney Docket No. 400.272US01

Title: NROM FLASH MEMORY WITH A HIGH-PERMITTIVITY GATE DIELECTRIC

CONCLUSION

Claims 1, 41 and 44 are amended herein. Claims 38-40 are canceled hereby. Claims 1, 35-37 and 41-44 are currently pending.

In view of the above remarks, Applicant believes that all pending claims are in condition for allowance and respectfully requests a Notice of Allowance be issued in this case. Please charge any further fees deemed necessary or credit any overpayment to Deposit Account No. 501373.

If the Examiner has any questions or concerns regarding this application, please contact the undersigned at (612) 312-2204.

Respectfully submitted,

Date: / Nov 06

Thomas W. Leffert

Reg. No. 40,697

Attorneys for Applicant Leffert Jay & Polglaze P.O. Box 581009 Minneapolis, MN 55458-1009 T 612 312-2200 F 612 312-2250